



Concentration in the European Electricity and Natural Gas Industries

Sophie Meritet - sophie.meritet@dauphine.fr

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Introduction



- In June 2005, the DG Competition launched a **sector inquiry** on the European electricity and gas markets in order to evaluate the level of competition.
- Releasing its **preliminary results** in February 2006, the DG Competition stated that the level of competition was unsatisfactory.
- In **January 2007**, the Commission confirmed it and clearly underlined that further actions would be necessary to create competitive energy markets in the European Union.

<http://ec.europa.eu/comm/competition/sectors/energy/inquiry/index.html>

- **Goal of this paper** : Discuss the results of the EC especially the concentration level and its consequences.


Introduction


Section 1:
Results of the energy
sector inquiry.

Section 2:
Concentration level
and its consequences.


Section 3:
Discussions


Conclusion

Introduction Section 1: Results of the energy sector inquiry. Section 2: Concentration level and its consequences. Section 3: Discussions Conclusion		
	<h2 style="margin: 0;">Outline of the presentation</h2> <ul style="list-style-type: none"> • Section 1: Results of the DG competition energy sector inquiry. <ul style="list-style-type: none"> • <i>Market concentration</i> • <i>Vertical foreclosure</i> • <i>Lack of market integration</i> • <i>Lack of transparency</i> • <i>Price fixing</i> • Section 2: Concentration level and its consequences. <ul style="list-style-type: none"> • <i>Special features</i> • <i>Actors reaction</i> • <i>Multimarket contacts</i> • Section 3: Discussions of the results and action taken by the European Commission. 	
	<small>Perth – November 2008</small>	3

Introduction Section 1: Results of the energy sector inquiry. Section 2: Concentration level and its consequences. Section 3: Discussions Conclusion		
	<h2 style="margin: 0;">Section 1: The European energy situation</h2> <ul style="list-style-type: none"> • Scarce oil and gas resources and high import dependence; • Fast growing demand for gas and electricity (increasing gas intensity); • Domestic resource coal handicapped by environmental impacts; • Geographical proximity to Russia, recent supply interruptions; • Leader in nuclear and renewable energy technologies; • Global champion of greenhouse gas emission reductions (European Trading Scheme); • In the process of introducing competition in the energy value chains; • Rightly addressed the desire for European energy policy is opportunity for European integration. 	
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Introduction Section 1: Results of the energy sector inquiry. Section 2: Concentration level and its consequences. Section 3: Discussions Conclusion	
	<h2 style="margin: 0;">DG Competition energy inquiry</h2>
	<p>It was time to launch an energy sector inquiry :</p> <ul style="list-style-type: none"> • Under renewed pressures due to pricing and security of supply • More and more blackouts (<i>Sweden, Italy, UK in 2003 and 2007 in Germany</i>) • More and more complex M&A in the EU • Development of the European Trading Scheme (ETS) • Global context : pressure on security of supply and new dynamic of East European states. • Against this background of disappointing market developments, the Commission has moved more aggressively to police and check anticompetitive conduct. A lack of competition ?
	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Commissioner Kroes</p> </div> <div style="text-align: center;">  <p>Commissioner Piebalgs</p> </div> </div>
	<p style="font-size: small;">Perth – November 2008</p>

Introduction Section 1: Results of the energy sector inquiry. Section 2: Concentration level and its consequences. Section 3: Discussions Conclusion	
	<h2 style="margin: 0;">Main results</h2>
	<p>Market concentration:</p> <ul style="list-style-type: none"> • Gas: wholesale markets remain highly concentrated, as incumbents largely control upstream markets and new entrants remain dependent on them. • Electricity: markets remain national; generation is highly concentrated; incumbents retain market power.
	<p>Vertical foreclosure:</p> <ul style="list-style-type: none"> • Gas: lack of liquidity on wholesale gas markets; difficulties to gain access to upstream gas; difficulties to gain access to infrastructure. • Electricity: vertical integration of generation, supply and networks continue; reduces liquidity on wholesale markets; reduces incentives to open up networks to new suppliers.
	<p>Lack of market integration:</p> <ul style="list-style-type: none"> • Gas: cross-border sales do not exert significant competitive pressure; new entrants find it difficult to find network capacity; incumbents not active in neighbouring markets. • Electricity: cross-border trade hampered by lack of capacity and long-term reservations; improved congestion management required;
<p style="font-size: small;">Perth – November 2008</p>	<p style="font-size: small;">6</p>



Main results

Lack of transparency:

- Gas:** network users request more information on access to networks; transit capacity; gas storage.
- Electricity:** wide recognition of lack of transparency; rules on transparency and enforcement vary widely in EU.


Price fixing:

- Gas:** prices are often linked to oil prices and so do not appear to reflect supply and demand; lack of liquidity on wholesale markets means that in most Member States there is little confidence in hub prices.
- Electricity:** the price of electricity appears to increase more than marginal costs; the degree of pass-through of CO2 prices varies widely; regulated prices or special schemes for large customers can distort competition.

Source : <http://ec.europa.eu/comm/competition/sectors/energy/inquiry/index.html>

- Main conclusion: European electricity and gas markets are concentrated at the country level with inadequate interconnection between countries, and lack of transparency and liquidity.
- Main worry: Exercise of market power particularly likely.

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7



Section2: Market concentration



- The concentration of the industry is under scrutiny : the degree of concentration is high.
- For example..

	Number of companies >5% of the market - generation	Share of largest three	Number of companies >5% of the market - retail	Share of largest three
Belgium	2	95	3-2 ¹	92
France	1	96	1	91
Germany	4	72	4	n.a. (70)
Italy	5	65	6	33
Spain	3	69	5	82
Netherlands	4	69	3	n.a.
UK	8	39	6	65


¹ Flanders/Wallony


- Market concentration : national incumbents remain dominant.
- Concentration measures (market shares) : first screening for potential abuse of market power (structural indice)
- Nevertheless...


Perth – November 2008
8


Introduction Section 1: Results of the energy sector inquiry. Section 2: Concentration level and its consequences. Section 3: Discussions Conclusion	
	<h2 style="margin: 0;">Special features</h2>
	<ul style="list-style-type: none"> • For example electricity has special features that make the exercise of market power particularly likely as short run demand elasticities very low, supply can not be stored and even competitive wholesale markets are naturally volatile making the distinction between efficient peak load pricing and abusive pricing problematic (<i>Newberry, 2006</i>) • Companies with modest market share have the ability and the incentive to raise price when markets are tight. • Jokow and Schmalnese (1983) warned us: <i>“If deregulation is to play a role in helping to improve the efficiency with which electricity is produced and used, it must be introduced as part of a long-term process that also encompasses regulatory and structural reform » (p.221).</i>
	
Perth – November 2008 9	

Introduction Section 1: Results of the energy sector inquiry. Section 2: Concentration level and its consequences. Section 3: Discussions Conclusion	
	<h2 style="margin: 0;">Actors point of view</h2>
	<ul style="list-style-type: none"> • The market is becoming less and less national as integration of markets proceeds <ul style="list-style-type: none"> • For example, the French utility EDF’s market share in the regional market of NW Europe is about 45%, and less than 25% in the European Union • There is no abuse of dominant position in a well regulated market • Financial size is key to achieve the investment in generation capacity needed by 2020... • ... Even though demand growth is slow, the fleet is ageing and the renewal phase is about to begin... • ...and huge research & development programs <ul style="list-style-type: none"> • New nuclear generation, CCS, innovative renewables, etc. • Actors reactions <ul style="list-style-type: none"> • Increase their size at the EU level • Cost programmes for all players • Marketing efforts in neighbouring countries soon replaced by M&A wave • Diversification : value chain – gas – electricity • M&A wave => electric power gas oligopoly <ul style="list-style-type: none"> • Suez – GDF, E.on – Endesa, Iberdrola – Scottish Power, Nuon – Essent • EDF??, Enel ??, Gas Natural ??
	Perth – November 2008 10

<p>Introduction</p> <p>Section 1: Results of the energy sector inquiry.</p> <p>Section 2: Concentration level and its consequences.</p> <p>Section 3: Discussions</p> <p>Conclusion</p>	<h2>Multimarket contacts in an oligopoly</h2> 
	<ul style="list-style-type: none"> In the EU, the constitution of an electric power - gas oligopoly induced a situation of “multimarket contacts” which is favourable to collusion,
	<ul style="list-style-type: none">a phenomenon quite widespread in many sectors (<i>Gimeno & Woo, 1999, Domanico, 2007</i>).
	<ul style="list-style-type: none"> But the overall evaluation will also depend on the dynamic properties of this new industrial structure: it means the ability to guarantee the continuity of services, investments and innovations...
	<ul style="list-style-type: none"> It is necessary to analyze - which is not easy - the properties of electric gas oligopoly in terms of dynamic efficiency. This type of efficiency refers to economic variables (<i>capacity for innovation and investment</i>) but also geopolitical (<i>with the negotiation level</i>).
	<p>Perth – November 2008</p> <p style="text-align: right;">11</p>

<p>Introduction</p> <p>Section 1: Results of the energy sector inquiry.</p> <p>Section 2: Concentration level and its consequences.</p> <p>Section 3: Discussions</p> <p>Conclusion</p>	<h2>Section 3 Discussions</h2> 
	<ul style="list-style-type: none"> Jan 10th: 2007 “Companies will face legal action for damaging consumers and business through anti competitive behaviour... this report will make uncomfortable reading for many energy companies”. On Networks: “The current level of unbundling of network and supply interest has negative repercussions on the market functioning. This constitutes a major obstacle to new entry and also threatens security of supply”
	<p>⇒ Decrease concentration through unbundling and market integration</p>
	<ul style="list-style-type: none"> In response to these results : Structural remedies and regulatory action Philippe LOWE: <ul style="list-style-type: none"> « Remedies arising from competition cases can be behavioural or structural. (...). As market concentration levels are very high in most energy markets, competition authorities are willing to prevent the market structure from further deteriorating. (...) According to Article 7 of Regulation 1/2003 structural remedies can be imposed where there is a substantial risk of a lasting or repeated infringement that derives from the very structure of the undertaking, or where behavioural remedies would be more burdensome on the dominant undertaking than a structural solution. »
	<p>Source : Philip LOWE (2007), <i>Effective unbundling of energy transmission networks: lessons from the Energy Sector</i></p> <p>Perth – November 2008</p> <p style="text-align: right;">12</p>

Introduction Section 1: Results of the energy sector inquiry. Section 2: Concentration level and its consequences. Section 3: Discussions Conclusion	
	<h2 style="margin: 0;">Remedies to improve competition</h2>
	<ul style="list-style-type: none"> • New legislation – the 3rd package <ul style="list-style-type: none"> • Institutional reform – power and scope of energy regulators and European regulator • Unbundling of transmission from supply/production • Transparency • Antitrust action • Regulatory action <ul style="list-style-type: none"> • Regional initiatives – create regional markets as stepping stone to creation of European market • Reducing the scope for distortion of competition Transparency <ul style="list-style-type: none"> • The problem of concentration in electricity and gas markets is made worse where dominant companies are not required to reveal information to other market participants. • A higher degree of transparency would provide new investment by non-incumbents that will contribute to eroding concentration • Transparency would also improve market surveillance.
	<ul style="list-style-type: none"> • Critics ?
	<div style="display: flex; justify-content: space-between;"> Perth – November 2008 13 </div>

Introduction Section 1: Results of the energy sector inquiry. Section 2: Concentration level and its consequences. Section 3: Discussions Conclusion	
	<h2 style="margin: 0;">Conclusion</h2>
	<ul style="list-style-type: none"> • The energy sector inquiry raises a lot of questions • The new trends toward the creation of “national champions” as well as recent mergers between gas suppliers and electricity producers raise serious concerns about abuses of market power and risk of future collusion. • The Energy Package January 2007 – March 2007 <ul style="list-style-type: none"> • A Powerful communication • A deepening of the vision • More affirmative targets (20-20-20 to 2020) • The question of unbundling • A more radical competition policy • Huge task ahead for Commission and national regulators to create competitive European markets and to police them if needed... <ul style="list-style-type: none"> • Competition policy has to be applied consistently to each case • Case-law is developing to better address energy-specific issues. • Is competition law an effective tool given special features of wholesale energy markets?
	<div style="display: flex; justify-content: space-between;"> Perth – November 2008 14 </div>